



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## M. FROIDEVAUX'S PARIS LETTER.

PARIS, Nov. 19, 1903.

The organization of the *voirie vicinale*, charged with the supervision of the district roads, dates from the year 1836, when the map of France, known as the map of the General Staff, was already well under way. With the needs created by the establishment of the great railways, the network of the communal roads extended until it covered the whole country with a system which is still in process of development.

The local administrations undertook, at an early day, to construct road-maps for immediate use, but without concerted action or reference to any general plan. It was evident to those who inspected the collection of these maps on exhibition at the Ministry of the Interior in 1878 that there was but one remedy for this state of things—to construct a map of the whole of France, according to a single plan, and on one scale.

The Ministry of the Interior determined to undertake this work and to bring out a map which should constitute a sort of dictionary of the highways and the paths of the country. A plan, devised by a Special Commission, received the approval of the Parliament, and the Ministry entered upon its task. The first sheets of this map appeared in 1879, and in 1896 the work was completed with the publication of the 587th sheet.

Of explorations there is something to report. In Africa, M. E. F. Gautier has visited a portion of the Muydir plateau and the whole of the Adrar Ahnet, and has pushed on to In-Zize, almost midway to Timbuktu; a point previously reached by none but Laing, about eighty years ago.

At In-Zize, M. Gautier discovered a number of inscriptions in Targui characters\*, and some rock drawings (evidently later than the Seventh Century, since they include the camel), and offering in their careful style a contrast with the summary drawings of the same epoch from southern Oran. The region is extremely arid and uninhabitable.

Very different is the country of Portuguese Guinea travelled by the Franco-Portuguese Boundary Commission, which has traced the course of the Rio Grande and the Componi, and assigned to

---

\* The alphabet of the Tuareg.

France the territory of Kadé. There remains to be settled the southern frontier of Cazamance, and when this is done it will be possible to issue exact maps of a West African district still very little known.

A similar work of delimitation has been performed by the Anglo-French Commission on the frontier of the Ivory and the Gold Coasts, from Nugua (on the Tanoe) to Bonduku, and from Bonduku to Tampuri ( $11^{\circ}$  north latitude). The map, on a scale of 1:250,000, is based on 2 determinations of longitude and 49 of latitude.

To the north of this region, Lieut. de Franco, in five years' exploration in the bend of the Niger, has accumulated a series of itineraries of the greatest value. His work outside of the bend of the Niger has already been utilized in Lieut. Chédeville's map of the Third Military Territory.

A letter from Capt. Lenfant, published in *La Géographie*, shows that at the end of August he cherished the hope of finding a waterway to Logone, notwithstanding the contradictory statements gathered on his march.

In the West, Lieut. Faure is exploring the Tuburi depression, in order to furnish information to Capt. Lenfant for this portion of his journey. In Eastern Africa, M. Charles Alluaud has made a zoological exploration from Mombasa to the shores of the Victoria Nyanza, and M. d'Ollone is on his way to Harrar.

In Asia, M. Martel is actively at work in the Caucasus. Capt. Cros, of the French Chaldean Expedition, has surveyed with the Peigné compass, and, barometrically, a complete itinerary from Damascus to Bagdad, joining the line of the railroad at Filudja, on the Euphrates. His map is on a scale of 1:100,000.

A letter from Lieut. Grillières, published in *La Géographie* for September, announces his success in tracing the Pu-tu-Ho, the Blue River, and the Niu-Lan-Kiang, which he ascended to its source, opposite Yang-Ling, across a country of which the very roughest districts of the Alps barely give an idea. He laid down his route on a scale of 1:50,000. His plan was to reach the frontier of Tibet and enter that land by the valley of the Salwen.

M. Gervais-Courtellemont, who lately returned from a journey of eighteen months in Yunnan and Tibet, reports having explored and mapped the bend of the Yang-tse. He has not yet published the account of his journey, but he has exhibited at the Galérie d'Orleans a display of the principal productions of the region and the kinds of merchandise for which it offers a market.

M. Bordat writes that in New Caledonia an exploring expedition

is about to start for the island of Espiritu Santo, in the New Hebrides.

In South America, M. Eugène Robuchon has left Iquitos, to ascend the River Putumayo as far as possible, and then to cross by land to the Napo and return to Iquitos—a journey which should furnish interesting comparisons with that of the regretted Dr. Crevaux in 1879.\*

Dr. Neveu Lemaire, of the Scientific Mission to Peru and Bolivia, made in June a study of Lake Poopo (Aullagas).

In company with Prof. Julien Thoulet, Dr. J. Richard, and other men of science, the Prince of Monaco, during his last oceanographic excursion, made a study of the deep-sea circulation at a distance from the French coasts. He took soundings to the depth of 4,835 metres (15,863 feet) and made fine collections, geological and planktonic, though unfavourable weather defeated his proposed investigation of the migrations of the sardine. One of his collaborators, Lieut. Sauerwein, has employed in hydrographic operations the *tachéographe* of M. Frantz Schrader, which traces automatically horizontal distances and differences of level. With the help of this instrument M. Sauerwein has executed a plan of the Mediterranean coasts around Monaco, and as far as the Italian frontier, gathering systematically samples of the bottom, and laying down on his map from the study of these the geology of the sea-bed.

Some of the publications, mentioned only by title in preceding letters, may now be considered at greater length to advantage.

Geographers devote themselves, perhaps too exclusively, to the study of the surface of the soil, with but rare allusions to the succession of materials in depth, and to the tectonic arrangement; as if they studied the façade to the neglect of the architecture. This method is declared by Commandant Barré, in the introduction to the *Architecture du Sol de la France*, to be no longer admissible. His previous studies (on the Region of the North-East, on the Forest of Fontainebleau, on the Upper Valley of the Saône) had prepared him for the composition of this instructive volume. Here are brought together, arranged on a general plan and harmonized with each other, the different elements which geology supplies to geographers for the description of France. Every page of the book

---

\* The atlas of *Fleuves de l'Amérique du Sud*, published in 1883 by the Société de Géographie, contains 12 plates which show the course of the Iça (Putumayo); constructed on the scale of 1:200,000 by M. J. Hansen from the MS. surveys of Dr. Crevaux.

shows how the structure of the soil makes the law for the movement of the waters, as well for the fainter slopes as for the most abrupt elevations, and regulates the disposition of the rock masses, forcing the sculpture of the soil to take account of the oldest forms, as well as the latest. Besides numerous sketches and geological sections, the work is illustrated by outline perspectives, which distinguish very clearly the different compartments of the soil. No doubt, we must regard Commandant Barré's volume as an essay to be modified in many respects hereafter, but none the less it enforces the lesson that the map must be read not only as a plan, but also as representing depth, and even duration of time.

Naturally allied to this work is the *Tableau de la Géographie de la France*, written by M. P. Vidal de la Blache, as an Introduction to the great History of France from the Earliest Times to the Revolution, edited by M. E. Lavissee.

M. de la Blache has taken especial pains to bring out the relation between the soil in its present aspect and its composition and geological history. We must not fear, he says, that we shall in this way disturb the impression created by the lines of the landscape, the forms of relief, the contour of the horizon, and the outward aspect of things. On the contrary, the comprehension of the causes enables us to appreciate more justly the resulting harmonious arrangement. In the first part of his admirable work M. de la Blache has shown how a portion of the earth which is neither peninsula nor island, nor properly to be regarded as a whole in physical geography, has developed into a political country and become at last a fatherland. In the second part, *Regional Description*, the physiognomy of France is presented under all its various aspects. The text is illustrated by various excellent maps.

Works such as those of MM. Barré and de la Blache are not to be produced until a country is in possession of exact and detailed topographical maps like the maps of France on the scale of 1:80,000, recently described in these pages. Col. Berthaut, head of the Cartographical Section in the *Service Géographique de l'Armée*, has lately published a book on the Military Geographical Engineers, the precursors of the officers to whom is due the execution of the map known as that of the General Staff, and fully described in all its details in an earlier work by the same author.

The volume just issued relates the history of the tasks accomplished by the military geographical engineers in countries outside of France.

It may, perhaps, be said that Col. Berthaut has passed too

lightly over the work done in the 18th Century beyond the boundaries of Europe; but his book tells a great part of the history of French geography for two centuries (from 1624 to 1831).

It contains reproductions in facsimile of numerous manuscripts and engraved maps, French and foreign, which constitute a veritable album of the changes effected in the methods of representing surface and relief in cartography.

The last work to be noticed is rather anthropological and ethnographic than geographical, though its value to students of geography is beyond question. This is Dr. Verneau's book on the Ancient Patagonians, a contribution, as he calls it, to the study of the Pre-Columbian races of South America. From the study of the collections brought by Dr. Machon from the Rio Negro and the Chubut, of those in the *Muséum d'Histoire Naturelle* and the Anthropological Society and those gathered in Patagonia by Comte Henry de la Vaulx, Dr. Verneau has satisfied himself that the most southern portion of the American continent was peopled in ancient times by many and various groups: *platy-dolichocephalic*, *hypsi-dolichocephalic*, *platy-brachycephalic*, *sus-brachycephalic*, besides the Araucanian type and another, also of small stature but extremely robust, and three others which deformed the skull in fashions differing from the practices in vogue among the Tehuelches and the platy-brachycephalic types. The peopling of the southern parts of America was effected by migration. The two ethnic groups, numerically the most important, are closely allied to the ancient races, the bones of which are found in the Brazilian caverns; others descended from the table-lands of the Andes and even from the Pacific slope. In Patagonia these various elements underwent a certain degree of amalgamation, but the original differences never entirely disappeared. In the absence of history and traditions, anthropology enables us to recognize very distinct races in the relics collected by explorers from the old burying-places and to throw some light upon a chaos which seemed, at first sight, to be inextricable.

These are the conclusions of a work conducted with absolutely correct method and science and exact in every detail. The International Jury of the L. Angrand Foundation has unanimously awarded to Dr. Verneau the prize in American History and Archæology.

HENRI FROIDEVAUX.